

ENGINEERING β -KETOACYL ACP SYNTHASE HAVING NOVEL SUBSTRATE SPECIFICITY

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ABSTRACT

Methods of altering substrate specificity of beta-ketoacyl-ACP synthase, and engineered beta-ketoacyl-ACP synthases so produced are provided. DNA sequences and constructs for expression of engineered beta-ketoacyl-ACP synthases, as well as the novel beta-ketoacyl-ACP
10 synthases produced therefrom are also provided. Such DNA sequences may be used for expression of the engineered beta-ketoacyl-ACP synthases in host cells, particularly seed cells of oilseed crop plants, for the modification of fatty acid composition.